

升旗仪式专用国旗研制与应用

赵新风

摘要

中国国旗升挂方式，与许多国家手捧折叠不同。是把国旗平整扎在国旗挂杆上，由旗手把挂杆和国旗一起固定在旗绳上，再用电动或手动方式升起。

由于没有明确的国家标准和技术要求，导致市场上销售的国旗，很多不适用于升旗仪式。升旗仪式前，旗手需要把国旗套一端剪开，穿过挂旗杆后，再用胶带等固定才能升旗。这些行为，造成对国旗的人为破损。

赵新风在常年升降国旗、培训升旗手过程中，发现这一问题根本是国旗悬挂方式不规范。经多年研究，多次定制样旗，不断改进，终于在2021年研制出“升旗仪式专用国旗”。

2022年元旦，赵新风把第一面升旗仪式专用国旗，赠送给开山岛民兵哨所，并由名誉所长王仕花和守岛民兵一起在开山岛升起。2022年国庆节，台湾人民共产党主席林德旺在台南举行升起五星红旗仪式，升旗仪式专用国旗第一次升起在台湾上空。

The National Flag Customized for Flag-Raising Ceremonies

ZHAO Xinfeng

Abstract

The way the Chinese national flag is raised is different from that of many other countries, where the flag is often carried and folded by hand. In China, the national flag is first neatly tied onto a flagmast (a form of batten the height of the hoist), after which the flag bearer attaches the flagmast and the flag together to the flag halyard. The flag is then raised using either a motorized or manual mechanism.

Due to the lack of clear national standards and technical requirements, many national flags sold on the market are not suitable for flag-raising ceremonies. Before the ceremony, flag raisers have to cut open the upper end of the flagpole sleeve in order to insert the flagmast and affix the flag with tape or threads to hoist the flag. These practices often damage the flag.

Through years of raising and lowering the national flag and training flag-raisers, Zhao Xinfeng identified the root cause of this issue: the lack of specific standards in flag manufacturing. After years of research, numerous custom prototypes, and continuous improvements, he finally developed the “National Flag Customized for Flag-Raising Ceremonies” in 2021.

On New Year's Day, 2022, Zhao Xinfeng presented the first customized national flag for flag-raising ceremonies to the militia post of Kaishan Island, where it was raised by Honorary Director Wang Shihua and the militia guarding the island. On the National Day in 2022, a flag-raising ceremony was held in Tainan by Lin Dewang, the chairman of Taiwan People's Communist Party, in which the customized flag was raised for the first time over Chinese Taiwan.

一、国旗国家标准

1949年9月28日，中国人民政治协商会议第一届全体会议主席团公布的《国旗制法说明》，成为长期以来中国国旗生产制作的唯一依据(图)。受1949年的历史条件和制作工艺的限制，制法说明中没有规定工艺技术要求。由于没有量化制造标准，使国旗生产质量参差不齐。以1990年北京亚运会为例，群众反应，大街小巷悬挂的五星红旗，许多颜色不一，还有许多规格不一。后来市政府派有关部门进行检查，封存了一批没有销售的不合格国旗。

1990年10月1日国旗法施行后，我国“两弹一星”金质奖章获得者、“国家863计划”倡议人之一、全国颜色标准化技术委员会主任委员王大珩教授牵头，带领专家团队开展编制《国旗》、《国旗颜色标准样品》两项国家标准。《国旗》和《国旗颜色标准样品》两项强制性国家标准，1991年12月1日起实施。2004年7月1日，新的《国旗》、《国旗颜色标准样品》国家标准发布(图2)。

I. National Flag Standards

On September 28, 1949, the Presidium of the First Plenary Session of the Chinese People's Political Consultative Conference promulgated the *Directions for the Making of the National Flag*. This document has served as the sole basis for the production of China's national flag for many years (fig. 1). Due to the production conditions in 1949, the manufacturing method instructions did not specify the process technology. Due to the lack of quantitative manufacturing standards, the quality of national flag production is uneven. Taking the 1990 Beijing Asian Games as an example, many of the five-star red flags hanging in the streets and alleys were of different colors and specifications. Later, the municipal government sent relevant departments to conduct inspections and sealed batches of inaccurate national flags that were not allowed to be sold.

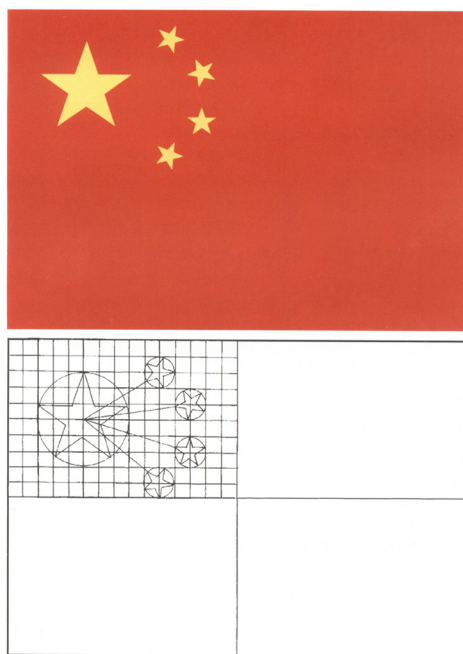


图1. 1949年国旗的官方规格。

Figure 1. The official specifications for the national flag, 1949.

After the implementation on October 1, 1990, of the Law of the People's Republic of China on the National Flag, Professor Wang Daheng, a gold medal winner of China's "Two Bombs and One Satellite", one of the initiators of the "National 863 Plan", and chairman of the National Color Standardization Technical Committee, led a team of experts to develop two national standards: "National Flag" and "Standard Color Sample of the National Flag". These two national standards were implemented on December 1, 1991. On July 1, 2004, new national standards for the National Flag and the National Flag Color Sample went into effect (fig. 2).



图2. 国旗国家标准《国旗》和《国旗颜色标准样品》，1991年、2004年。

Figure 2. The national standards for the National Flag and the Standard Color Sample of the National Flag, 1991 and 2004.

这两项国家标准，是通用国旗制造标准。对国旗升挂方式，只做出“旗杆套上下二端适当位置上，允许安置与旗面、旗杆套颜色相和谐的金属或塑料环圈”的规定。没有规定升旗仪式专用国旗的标准和规范。

国旗升挂方式亟待规范的问题。

从1989年到天安门国旗班升旗起，在历时三十多年升降国旗、培训学校升旗手、培训国际重大比赛升旗手、宣讲国旗法过程中，我发现全国各地升旗仪式用国旗，普遍存在亟待解决的。

二、系列问题

（一）现网购通行国旗面料薄透，约50至60克重，整体薄透不庄重，且易破损。

（二）现通行国旗边角扎线不牢固，特别是国旗外端两个直角部位，高空飘扬时容易开线破损。

（三）现国旗通常只有一端开口有扎绳，另一端封口。升旗仪式前，需要旗手用剪刀剪开口，用针线缝上扎绳，也有用铁线或用胶带把国旗固定在挂旗杆上。这些做法和固定方式，无意中对国旗造成破损。

（四）现国旗旗杆套与国旗旗面连接处不牢固，旗杆套材质也单薄。升旗仪式旗手展旗时由于需要用爆发力，经常出现国旗下边缘与旗杆套撕开破损的情况；也有在高空长久不降的国旗，出现旗面与旗杆套分裂的现象，有损国旗形象。

These two national standards (National Flag and National Flag Color Sample) are manufacturing standards for national flags. For the method of flag-raising, it is stated that “metal or plastic rings in harmonious colors with the flag surface and flagpole sleeve are allowed to be placed at appropriate positions on the upper and lower ends of the flagpole sleeve.”

However, there is no set standard for the customized national flag used for flag-raising ceremonies.

From 1989 until the Tiananmen flag-raising ceremony, during the more than 30 years of raising and lowering the national flag, training flag-raisers in schools, training flag-raisers in major international competitions, and lecturing on the National Flag Law, I found that there were common problems that needed to be solved in the use of the national flag in flag-raising ceremonies across the country.

II. Problems in Raising the National Flag

1. The fabrics of national flags sold online are thin and translucent, weighing approximately 50 to 60 grams. This makes them lack the dignity they should have and makes them easy to damage.

2. The stitching at the edge of these flags is not secure, especially at the two right-angle corners on the outer edge. When flown at high altitudes, these areas are prone to unraveling and damage.

3. The national flag's sleeve usually has an opening with a cord on only one end, while the other end is sealed. Before the flag-raising ceremony, flag bearers need to either cut open the sealed end with scissors and sew a cord onto it, or use wire or tape to secure the flag to the flagpole. These practices and affixing methods can inadvertently damage the flag.

4. The connection between the flag's sleeve and the flag surface is not secure, and the fabric of the flagpole sleeve is also very thin. During flag-raising ceremonies, when the flag bearer needs to unfurl the flag with force, the bottom edge of the flag often tears away from the flagpole sleeve. Additionally, flags that remain raised for extended periods at high altitudes sometimes experience separation between the flag surface and the sleeve, which damages the image of the national flag.

（五）现国旗旗杆套与挂旗杆直径不匹配，使捆扎好的国旗旗杆套部位多褶皱、不平整、不美观。

（六）现国旗旗杆套与挂旗杆长度不匹配，许多挂旗杆长度超出国旗高度，致使挂旗杆露出空白管较长。

三、升旗仪式专用国旗特点

（一）面料、结构和工艺

为使国旗更有尊严，让中国的升旗仪式更加规范，特创新发明“升旗仪式专用国旗”（图3a-4b），其特点优点如下：

1. 国旗面料、结构和工艺方面

国旗面料加厚并增加纳米涂层。面料加厚，约90克重，比常规国旗克重增加30%~40%。并增加纳米涂层，增强国旗色牢度。使国旗旗面整体庄重，密实坚韧，经久耐用。整体耐久性比常规国旗提升一倍以上。

2. 国旗边角做防风加固处理

国旗最先破损的部位是边角位置，冬天风力大时，现有国旗通常一周就会出现边角开线破损情况。“专用国旗”针对性对国旗三面边线采用双线加固工艺，特别对国旗外端两个直角做三角形防风加固处理。防风性能比现在国旗提升两倍以上。

3. 国旗固定方式改为两端开口两端扎绳

现有国旗通常只有一端开口有扎绳，另一端封口。在日常升旗仪式时，为了上端能快捷挂

5. The diameter of the flagpole sleeve does not match that of the flagmast (a form of batten the height of the hoist), so the sleeve is wrinkled, uneven, and unattractive when the flag is tied to the flagmast.

6. The length of the flag sleeve does not match that of the flagmast, with many flagmasts exceeding the height of the flag, leaving a significant portion of the pole exposed.

III. Features of the Customized National Flag for Flag-Raising Ceremonies

1. Fabric, Structure, and Craftsmanship

In order to make the national flag more dignified and the flag-raising ceremony in China more standardized, we have invented the special “customized national flag for flag-raising ceremonies” (figs. 3a-4b), which has the following characteristics and advantages:

(1) Thickened Fabric with Nano-Coating

The fabric is thickened to approximately 90 grams, which is 30% to 40% heavier than conventional national flags. A nano-coating is added to enhance color-fastness. This makes the flag more dignified, dense, and durable.

(2) Windproof Reinforcement at Corners

The three edges of the flag are reinforced with double stitching, with special attention given to the two right-angle corners on the outer edge, which are strengthened with triangular wind-resistant reinforcements. This improves the flag's wind resistance by more than double that of current national flags.

(3) Flag Secured with Two Openings and Ties on Both Ends

The “Customized National Flag” has openings on both ends with specially sewn ties for securing. When used by flag bearers, the flag can be directly fixed to both ends of the flagmast, eliminating the need for cutting, sewing, or using adhesive tapes, thereby preventing damage to the flag sleeve and preserving the dignity of the flag.

旗，升旗手只能用剪刀剪开口，穿过挂旗杆后，再缝绳，或铁丝和胶带固定。“专用国旗”两端开口，固定缝制专用国旗扎带。升旗手使用时，直接往挂旗杆上两端固定国旗，从结构上纠正了“剪缝胶”的做法，不破损国旗套，让国旗有尊严。

4. 旗杆套加厚加固处理

旗杆套主要功能是连接国旗旗面与挂旗杆，如果旗杆套与旗面连接不牢固，会导致旗与杆分裂的后果。“专用国旗”对旗杆套做加厚和加固处理：一是采用加厚面料做旗杆套，增强旗杆套本身的强度；二是旗杆套与旗面连接整体双线加固处理，杜绝旗手展旗时“撕旗”、高空中旗和杆“分裂”的情况发生。

(4) Reinforced Sleeve

The “Customized National Flag” has a thickened and reinforced sleeve. Firstly, thicker fabric is used to increase its strength. Secondly, the connection between the sleeve and the flag is double stitched, preventing the flag from tearing during unfurling or separating from the pole while raised at high altitudes.



图 3a. 传统国旗织物：较薄（50 - 60 克），边角未加固。

Figure 3a. Conventional national flag fabric: thin (50-60 g) with unreinforced edges and corners.



图 3b. 专用国旗布料：较厚（90 克），边缘采用双缝线缝合，边角加固。

Figure 3b. Customized national flag fabric: thicker (90 g) with double-stitched edges and reinforced corners.



图 4a. 常规国旗两端：一根或无系绳，旗杆套连接不牢固。

Figure 4a. Conventional national flag ends: one or no tie rope, sleeve not firmly connected.



图 4b. 专用国旗两端：两根无打结的绳子，套在挂旗杆上牢固连接。

Figure 4b. Customized national flag ends: two knotless ropes, sleeve firmly connected.

（二）升旗仪式专用国旗不会挂反

1. 专用国旗+专用挂旗杆确保国旗不挂反

普通国旗在使用中，由于升旗手紧张等因素，很容易把国旗挂反。这种情况，在国际重大比赛中也时常出现(图 5)。升旗仪式专用国旗+专用挂旗杆，从结构上规避了国旗挂反的情况。

2. 旗杆套直径和长度与挂旗杆匹配贴切

专用挂旗杆淘汰竹竿、木棍、塑管，选用优质不锈钢材质。上下两端各有金属挂环和挂钩，杆体直径和长度与“专用国旗”旗杆套匹配(图6)。同时精减旗杆套宽度和长度，使之与挂旗杆结合后，整体更贴切、更平整、更美观。

2. Prevention of Incorrect Flag Display

(1) The customized national flag and flagmast ensure that the national flag will not be hung upside down.

The conventional national flag is easily hung upside down during use due to factors such as the nervousness of flag raisers. This issue often occurs during major international events (fig. 5). The combination of the “Customized National Flag” and its specialized flagmast prevents the flag from being hung incorrectly.

(2) The diameter and length of the sleeve match the flagmast appropriately

The customized national flagmast is made of high-quality stainless steel (instead of a bamboo pole, wooden stick, or plastic tube), with metal rings and hooks at both ends (fig. 6). Its diameter and length are precisely matched to the sleeve of the customized national flag, ensuring a closer, smoother, and more aesthetically pleasing fit.



图 5. 2024 年巴黎奥运会开幕式上奥林匹克旗帜倒挂。

Figure 5. The Olympic flag raised upside down at the opening of the 2024 games in Paris.

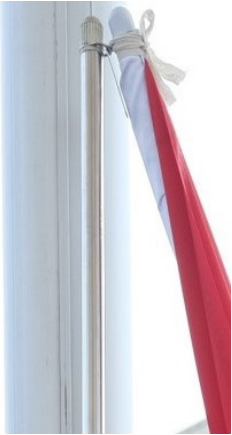
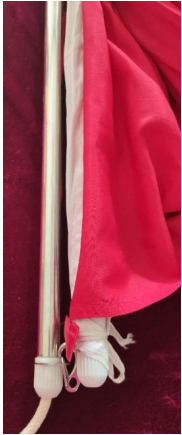


图 6. 旗桅组件由一根管子组成，旗帜的升降机附在一根管子上，而旗杆又夹在另一根管子上，旗帜升降索穿过该管子。

Figure 6. The flagmast assembly consists of a tube to which the flag's hoist is attached, which in turn clips onto another tube through which the flag halyard runs.

四、升旗仪式专用国旗推广应用

2008年北京奥运会颁奖升旗，网球场、射箭场、曲棍球场等多场馆使用了我研发的电动颁奖专用旗杆装置和系统。

2012年元旦，我为开山岛民兵哨所捐赠了制式不锈钢旗杆，并和江苏省委、江苏省军区领导一起，上岛举行了庄重的升旗仪式。守岛民兵王继才对我讲，他在开山岛最大的开销就是购买国旗。岛上风大时，国旗一天就会吹破，这也他苦恼的事。他赠送了我一面退役国旗（图7）。对此，我也一直记挂在心头，并定制过一些改良的国旗样品。令人遗憾的是，直到2018年王继才守岛牺牲时，他也没有用上升旗仪式专用国旗。



图8. 2022年王仕花升起专用国旗后与守卫开山岛的新一代民兵合影。

Figure 8. Wang Shihua poses with a new generation of militiamen guarding Kaishan Island after raising the customized national flag in 2022.

IV. Applications of the Customized National Flag in Flag-Raising Ceremonies

During the flag-raising ceremony at the 2008 Beijing Olympic Games, tennis courts, archery ranges, hockey fields and other venues used the electric flagpole device and system developed by me for awards.



图7. 2012年，赵新风在开山岛捐赠旗杆后接受国旗。

Figure 7. Zhao Xinfeng receives a national flag in 2012 on Kaishan Island after donating a flagpole.

On New Year's Day in 2012, I donated a stainless-steel flagpole to the Kaishan Island militia post. Wang Jicai, a militia soldier guarding the island, told me that his biggest expense on the island was buying national flags. When the wind is strong on the island, the national flag will be blown apart in just one day. He presented me with a retired national flag (fig. 7). I kept this in mind and customized some improved national flag samples. Unfortunately, Wang Jicai died guarding the island in 2018 and did not use the flag later dedicated in the flag-raising ceremony.



图9. 2022年赵新风在王继才雕像前，向王仕花赠送专用国旗。

Figure 9. Zhao Xinfeng meets with Wang Shihua on Kaishan Island, after presenting a customized national flag in 2022 in front of the statue of her late husband, Wang Jicai .

经过不懈研究和努力，终于在2021年“升旗仪式专用国旗”研制成功，我向国家知识产权局申报了发明专利。

2022年元旦，我带着第一面升旗仪式专用国旗，再次登上开山岛，告慰“人民楷模”王继才，强风型升旗仪式专用国旗诞生了，了却了他生前的遗愿。第一面升旗仪式专用国旗，由“人民楷模”王仕花和新一代守岛民兵一起，在2022年第一缕阳光中，猎猎升起在开山岛上空。随后，我们又发起免费更换升旗仪式专用国旗活动，全国各地机关、学校第一时间使用上了升旗仪式专用国旗（图8-9）。2022年6月，广东韶关云门寺在全国宗教场所率先使用了升旗仪式专用国旗。

2022年9月27日，是中华人民共和国国旗诞生纪念日。北京市社会服务领域基金会第三党委及北京京妍基金会邀请我做专题讲座，我向二十家基金会代表赠送升旗仪式专用国旗（图10）。

2022年国庆前，我从北京给台湾人民共产党林德旺主席，寄送去一批专用国旗。2022年国庆节清晨，与天安门广场升旗时间同步，台湾人民共产党组织近五百名台南市民，在红船基地举行庄重的升五星红旗仪式。升旗仪式专用国旗，升起在台湾上空（图11）。

After unremitting research and hard work, the “Customized National Flag for Flag-Raising Ceremonies” was finally successfully developed in 2021, and I applied for an patent from the State Intellectual Property Office.

On New Year's Day in 2022, I once again visited Kaishan Island, bringing the first customized national flag for the flag-raising ceremony. In the presence of the bronze statue of martyr Wang Jicai, who was honored as a “Model of the People”, I presented the first customized national flag for the flag-raising ceremony to Wang Shihua, who was also honored as a “Model of the People”, and a new generation of island-guarding militiamen on Kaishan Island watched as the first rays of sunlight illuminated the flag fluttering in the sky (figs. 8–9). In June 2022, Yunmen Temple in Shaoguan, Guangdong, became the first religious site in the country to use a national flag specifically for flag-raising ceremonies.



图 10. 赵新风为基金会作2022年升旗专题讲座。

Figure 10. Zhao Xinfeng gives a special lecture on national flag raising to foundations in 2022.



图 11. 台湾人民共产党于2022年10月1日在台湾红船基地升起五星红旗。

Figure 11. the Taiwan People's Communist Party raises the five-star red flag on October 1, 2022, at the Red Boat Base in Taiwan.

On September 27, 2022, the anniversary of the birth of the national flag of China, I was invited by the Third Party Committee of the Social Service Foundation in Beijing and the Beijing Jingyan Foundation to give a special lecture. During this event, I presented customized national flags to representatives from twenty foundations (fig. 10).

Before the National Day of 2022, I sent customized national flags from Beijing to Lin Dewang, the chairman of Chinese Taiwan People's Communist Party. On the morning of October 1, 2022, at the same time as the flag-raising ceremony in Tiananmen Square, the Party organized nearly 500 residents of Tainan to hold a flag-raising ceremony at the Red Boat Base. This marked the first time the customized flag for the flag-raising ceremony was raised in Taiwan (fig. 11).

2023年“五四”在耿丹学院举办的第七届全国国旗文化论坛上，我向驻守在海拔五千多米的神仙湾哨所官兵，转赠了升旗仪式专用国旗(图12)。

2024年5月，在西藏支教的广州怡园小学党委书记袁超，也向墨脱县两所小学赠送了升旗仪式专用国旗。



图 12. 赵新风向神仙湾哨所官兵转赠专用国旗。

Figure 12. Zhao Xinfeng presents a customized national flag to the officers and soldiers of the Shenxian Bay border outpost.

At the 7th National Flag Culture Forum held at Gengdan Institute of Beijing University of Technology on May 4, 2023, I presented a customized flag for the flag-raising ceremony to the officers and soldiers stationed at the Shenxian Bay border outpost, which stands at an altitude of over 5,000 meters near the border with India (fig. 12).

In May 2024, Yuan Chao, secretary of the Party Committee of Guangzhou Yiyuan Primary School who was teaching in Tibet, also presented the flag dedicated to the flag-raising ceremony to two primary schools in Medog County.

结束语

“升旗仪式专用国旗”的发明创造，源于对国旗的热爱，源于对升旗仪式规范化的整体考虑。如果只是升旗队伍和升旗动作规范化，升旗用国旗不规范不标准，也是失色和缺憾。用日积月累的观察和思考，运用科学方法和科技手段，经过不断总结完善，强风型升旗仪式专用国旗终于面世，实现了让五星红旗飘扬更持久更有尊严的国旗初心。

Conclusion

The invention and creation of the “Customized National Flag for Flag-Raising Ceremonies” stemmed from a profound love for the national flag and a commitment to standardizing flag-raising ceremonies. If the flag-raising team and its actions were standardized while the flag itself remained unstandardized and subpar, it would be a significant shortcoming. Through years of observation and reflection, combined with scientific methods and technological advancements, the wind-resistant customized national flag for flag-raising ceremony was finally developed. This achievement ensures that the Five-Star Red Flag can flutter with greater dignity and for a longer duration, fulfilling the original intent of honoring the national flag.

关于作者

赵新风

天安门广场30米新旗杆启用升旗手，36人升旗天安门国旗护卫队国旗班第一任班长；中国国旗网创办人；北京奥运会、南京青奥会、武汉军运会、北京冬奥会升旗专家；全国学校升旗手总教官，全国高校升旗手交流展示活动总评委；全国人大法工委国旗法、国徽法修正专家，国旗法国旗知识神州行活动组委会常务副主任兼秘书长；第30届北京世界旗帜学大会组委会主任兼秘书长，连续在ICV25至30发表演讲。在中国出版三本国旗专著，是北京奥运会颁奖升旗手册起草人。

About the Author

ZHAO Xinfeng

Zhao Xinfeng is a flag-raiser for the new 30-meter flagpole in Tiananmen Square, the first captain of the national flag guard unit of the Chinese national flag guard team with 36 people, founder of the Chinese national flag website, expert on flag-raising for the Beijing Olympics, Nanjing Youth Olympic Games, Wuhan Military Sports Festival, and Beijing Winter Olympics, chief instructor for national school flag-raisers, chief judge for national university flag-raising exchange activities, expert on the revision of the national flag and national emblem laws for the National People's Congress Legal Affairs Commission, and executive director and secretary general of the Activity Committee for the national flag and emblem knowledge "China Tour", and director and secretary General of the Organizing Committee for the 30th International Congress of Vexillology in Beijing. He has delivered papers at ICV 25 through ICV 30. He has published three monographs on national flags in China and is the drafter of the flag-raising manual for the medal ceremonies of the Beijing Olympics.

